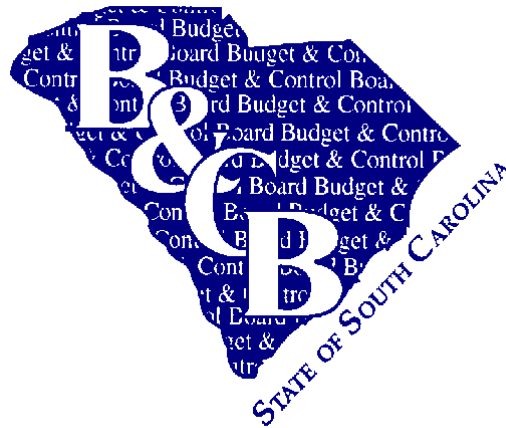


# **RETURN ON INVESTMENT STUDY**

**Conducted by**

**South Carolina  
Budget and Control Board  
OFFICE OF HUMAN RESOURCES**



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**JULY 2002**

**Revised May, 2003**

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OFFICE OF HUMAN RESOURCES  
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**Background**

The South Carolina Budget and Control Board is committed to using the Malcolm Baldrige National Quality Award as the standard by which it is to be evaluated. The Award's criteria provide specific guidelines for performance measurement, addressing both the efficiency and the effectiveness of the organization.

Category 7 of the Year 2001 Baldrige Award criteria, item 7.2a.(1) asks:

What are your current levels and trends in key measures/indicators of financial performance, including aggregate measures of financial return and/or economic value, as appropriate? <sup>1</sup>

Mark Graham Brown, a management consultant and former senior Baldrige examiner, states that appropriate indicators should present financial results that compare to benchmark organizations in similar businesses and to industry averages. He points out that the focus is on balancing all aspects of an organization, including both financial and other factors such as employee morale and customer satisfaction.<sup>2</sup>

These requirements suggest that measures of return on investment (ROI) which can be compared to similar business activities would be very appropriate as part of a "balanced scorecard" of performance indicators.<sup>3</sup> If such measures were developed, comparison to private sector human resources ROI could provide information critical to decisions regarding policy issues such as privatization and public-private marketplace competition.

**Discussion**

In the Summer 2002 issue of *Public Personnel Management*, Todd Chmielewski and Jack Phillips describe a return-on-investment evaluation process for public human resources organizations.<sup>4</sup> Their work is based on Kirkpatrick's Four-Level Evaluation model and the Phillips Five Level ROI Framework.<sup>5</sup> The former's well known approach has been widely used to capture the impact of programs on organizations. The Phillips model takes this one step further. It "---formulates procedures for measuring investment (cost incurred) as well as indicators of return (savings and *costs avoided* (emphasis added)).<sup>6</sup> This fifth level is termed "return on investment" and defined as an evaluation of the monetary value of a program's measurable business impact within an organization. This approach to ROI is an excellent method for conducting program evaluation. The case study used by Chmielewski and Phillips illustrates this.<sup>7</sup> Using a modified (no control group) classic experimental design, they measure the monetary value of an organizational unit's output before and after a training evolution, and then compare the two. In their words, they determined "---the dollar value of the behavioral changes as a result of the training. (Participants and supervisors provided the necessary

information)."<sup>8</sup> ROI was defined as the comparison of the value of the net change (the benefit) to the cost of the training.<sup>9</sup> This provided excellent justification for the program.

They also observed that,

The threat of outsourcing has also forced managers to more closely align programs to organizational objectives and to measure success, so that executives can understand the HR function contributions to the organization.<sup>10</sup>

They concluded by stating that "---ROI calculations can be developed reliably and accurately for almost any type of HR program."<sup>11</sup>

From a programmatic perspective, this strategy works well. Individual HR programs can be evaluated before and after their inception by calculating the dollar value of increases or decreases in organizational output. This can justify *programs*, but what of the HR organization itself? Human resources development and management are central components of all organizations. In the public sector, HR is mandated by statute. The real question goes beyond that of program evaluation. Rather, it is: "Where should the HR function reside, in the public sector or the private sector?"

### **Public versus Private**

Can the private sector deliver HR programs "better" than the public sector? The larger question of public versus private administration of governmental functions continues to be vigorously debated. The private sector orientation focuses on "---the market distribution of economic goods and services and in turn how individuals and groups maximize the pursuit of their own objectives."<sup>12</sup> Conversely, the public sector orientation focuses on "--- goods that are distinguished from private goods (those that can be measured, marketed and counted) by virtue of the fact that they are highly indivisible."<sup>13</sup> Characteristics of indivisible public goods include equity, accessibility, responsiveness and empathy for individual needs.

The question of "better" is one of service quality and cost effectiveness. Service quality addresses the characteristics of public goods and is defined in the management literature as customer satisfaction with those characteristics.<sup>14</sup> Therefore, a comparison of customer satisfaction between public and private service delivery organizations can allow one to determine if one is "better" than the other. Then, a comparison of the transactional cost efficiencies of service delivery for each organization can be made. The result will be an "apples-to-apples" comparison answering the question regarding which one is "better."

**Customer Satisfaction Comparison.** The Baldrige Criteria recommend that performance indicators be benchmarked against best practices of similar organizations. Allstate Insurance has been identified as the best practice human resources benchmark for service delivery organizations.<sup>15</sup> It reports that 82 percent of its human resources

customers are satisfied or very satisfied with the services they receive. By comparison, the Office of Human Resources reports a customer satisfaction level of 92 percent.<sup>16</sup>

With service quality not an issue, the question then becomes: "Can government receive a greater return on its investment in human resources management and development in the public or private sector for the same quality of services?" In other words, can the government save money by outsourcing? In order to respond to this, one must return to the earlier statement of Chmielewski and Phillips concerning cost avoidance (costs incurred and costs *avoided*) as being relevant to return on investment.<sup>17</sup> The cost of delivering HR services can be computed and compared to the private sector. If public sector costs exceed private sector costs, the policy issue of outsourcing should be considered. If the opposite is true, public HR professionals should take pride in their accomplishments and strive to improve their already excellent service delivery processes.

### Human Resources ROI

**Definition.** The classic definition of return on investment is based on cost-effectiveness, i.e., the ratio of inputs to outcomes. According to David Osborne, the co-author of *Reinventing Government* and *The Reinventor's Fieldbook*, "---it answers the question, 'How effective is your spending'? It measures not how many outputs you can produce for your dollar but how much value you produce."<sup>18</sup>

Human Resources (HR) ROI is concerned with the value created through HR's contributions to the desired outcomes of the organization. In their book, *The HR Scoreboard*, Brian E. Becker and associates identify a three-step process to determine the ROI in HR. They point out that the process is simple in concept: determine the total costs of the HR function, compute the value added by it and compare the two. However, as they say, the devil is in the details.<sup>19</sup>

Citing research conducted by Rutgers University, they recommend that the HR function be divided into categories representing the various HR functions.<sup>20</sup> Then, using colleagues, subject matter experts, focus groups and archival data, one can generate dollar value estimates for each of the categories and compare them to those of other similar (public and private) organizations.<sup>21</sup>

It is difficult to determine the actual cost of service delivery for public organizations and still more difficult to obtain comparable information from the private sector. Much of the private sector information is considered proprietary. However, if such information is obtained, procedures such as *activity-based costing* and *competitive benchmarking* can be used to ensure that the information is truly comparable.

**Activity-Based Cost Analysis.** According to Kaplan and Norton in their book, *The Balanced Scorecard*:

Activity-based cost analysis provides a linkage between spending on indirect, support and administrative resources, and the activities and

business processes performed by these resources and the outputs they produce and service.<sup>22</sup>

This is in agreement with Russell M. Linden who states in his book, *Seamless Government: A Practical Guide to Re-Engineering in the Public Sector* that activity-based costing gives managers information on the categories they control---salaries, fringe benefits, travel, supplies, equipment and the like. "It shows the true costs of agency activities and processes."<sup>23</sup> The application of this strategy to HR should provide the true cost of services.

**Competitive Benchmarking** directly compares the costs of the various functions of the organizations under study, both public and private. This creates a competitive standard allowing government employees and agencies to break down the traditional monopoly of government and compete in the open marketplace. The supporting strategy of activity-based costing provides the foundation for competitive benchmarking and ensures that it is conducted on a level playing field, i.e., comparing "apples-to-apples."<sup>24</sup>

### **A Case of ROI in State Government**

The South Carolina Budget and Control Board's Office of Human Resources (OHR) decided to develop this methodology for ROI determination. A cross-functional team of the agency's human resources professionals agreed that the use of activity-based costing and competitive benchmarking was appropriate for determining human resources return on investment. The team identified the steps listed in Table 1.

**Table 1. Development Steps**

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1. Identify each function provided by OHR.
  2. Identify all persons for each function and their direct and indirect cost.
  3. Identify the percent of time each person spends in each functional area.
  4. Allocate personnel costs across functions by percent of time.
  5. Identify all overhead costs for the Office.
  6. Allocate overhead costs across functions.
  7. Determine management and organizational support costs.
  8. Allocate management and support costs across functions.
  9. Sum personnel, overhead and management costs for each function.
  10. Determine the outsource (private sector) cost of each function.
  11. Compare OHR costs to private sector cost for each function.
  12. Compute return on investment for each function
  13. Combine all results to obtain ROI for the Office of Human Resources.
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**HR Services.** After extensive consultations, the team identified the functional categories of service delivery listed in Table 2.

**Table 2. Functional Categories**

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1. Human Resources Information System	7. TempO
2. Classification Systems	8. Training
3. Compensation	9. Consultation
4. Employee Relations	10. Recruitment
5. Grievance	11. General Organizational
6. Mediation	and Management Support

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**Personnel Costs.** The direct and indirect costs for each employee were obtained from existing financial records. These include salary, retirement and fringe benefits. Personnel who had terminated employment during the year were included for the portion of the year for which they were employed. The team estimated the percent of time each employee spent in each category for the fiscal year using 1950 hours as the base for 100 percent employment. These estimates were determined through discussions with the service delivery personnel and their supervisors. Each employee's total personnel cost was then multiplied by the percentage of time spent in each category. The resulting costs were summed, yielding the personnel cost of each category.

As illustrated in Table 3, if employee A spent 10 percent of her time in the classification area and Employee B spent 15 percent of his time there---

**Table 3. Personnel Costs, Classification**

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Name	Pct. of <u>time</u>	Total salary <u>and fringe</u>	No. of hours	Cost
A	10%	AAA	195.0	.10(AAA)
B	15%	BBB	287.5	.15(BBB)

---

personnel cost = .10(AAA) + .15(BBB)

---

By applying this procedure to the South Carolina Office of Human Resources:

Personnel cost for the Classification System category = \$224,510.65

**Overhead Costs.** These costs include all non-personnel costs associated with the Office of Human Resources, including rent, transportation, supplies, etc. They were aggregated and then allocated to each functional area according to the percent of hours expended in each area. This does not include the indirect costs of general organizational and management support. Table 4 illustrates this for the Office's classification area.

**Table 4. Overhead Costs, Classification**

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$$\begin{aligned}\text{Operating expenses for OHR} &= \$231,767.82 \\ \text{Pct. of hrs. expended in classification} &= 18.92\% \\ \text{Operating expenses for classification} &= \$231,767.82 \times .1892 \\ &= \$43,850.47\end{aligned}$$

$$\text{Cost for the Classification System} = \$224,510.65 + \$43,850 = \$268,361.12$$

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The direct labor cost per hour for the Classification System can be computed by dividing total hours by total expenses. This yields a cost per hour of \$32.00.

**Management Costs.** The percent of time each employee spent in organizational support and management was separately determined and multiplied by his or her total personnel cost. These management and support costs and associated hours were summed for the organization and a cost per hour was computed by dividing costs by hours.

$$\text{Management and support cost per hour of OHR} = \$18.83.$$

**Total Costs.** The total cost per hour for each category is the sum of total operating cost per hour plus management and support cost per hour. For the Office's Classification System---

$$\text{Total cost per hour} = \$32.00 + \$18.83 = \$50.83$$

The same can be done for each category, yielding a cost per hour that can be used to compare with other organizations.

### **Competitive Benchmark Costs**

The team contacted other state human resources offices and confirmed that although some agencies had contracted out some services, no other state has developed a similar organization-wide strategy for ROI. The team also contacted local, regional and national private human resources providers. The private sector organizations declined to provide comparative cost data, stating that such information was proprietary. However, the team discovered that the Federal General Services Administration (GSA) has signed a master contract with Grant Thornton LLP for human resources services delivery nationally.<sup>25</sup> Any organization eligible to procure goods and services through GSA can purchase human resources services through this contract by submitting a Statement of Work to the appropriate Contracting Office.

The team, after consultations with senior management, decided that the GSA price list was appropriate for private sector competitive benchmarking, since there had been a competition for the contract and it is national in scope.

The GSA price list is compiled by labor category. In order to compare OHR's costs to GSA costs, it was necessary for the team to determine which labor categories best describe the OHR employees. The team's findings are listed in Table 5.

**Table 5. GSA and OHR Labor Category Comparison**

<u>OHR Pay Band</u>	<u>GSA Labor Category</u>
4	Administrative
5	Midpoint of Consultant I and Consultant II
6	Senior Consultant II
7	Manager II
8	Midpoint of Senior Manager I and Senior Manager II

For example, if an OHR employee were in pay band 6, his or her equivalent labor category would be Senior Consultant II. Each OHR employee would then have two hourly rates---the GSA equivalent private sector cost per hour and the state government total cost per hour. An example of this is presented in Table 6.

**Table 6. Dual Rate Comparison**

<u>Employee</u>	<u>GSA Rate</u>	<u>State Rate</u>
Consultant II	\$81.00	\$40.00
Administrative	38.00	24.00

The private sector cost per hour for each functional area can be found by multiplying each employee's GSA rate by the number of hours the employee spent in each area and aggregating the result, just as was done in computing the total public sector cost per hour. The results are contained in Table 7.

**Table 7. Comparison of Public and Private Sector ROI**

Categories	Total OHR Costs	Total GSA Costs	Return on Investment
HRIS	\$274,656	\$370,220	1.35
Classification Systems	382,317	658,099	1.72
Compensation	386,746	680,467	1.76
Employee Relations	429,187	804,811	1.88
Grievance	276,176	405,438	1.65



**Table 7. Comparison of Public and Private Sector ROI** Continued

Mediation	251,158	375,265	1.49
TempO	261,438	298,849	1.14
Training	546,265	1,003,340	1.84
Conference Coordination	204,198	226,395	1.11
Recruitment	319,911	339,352	1.06
Consultation	370,024	803,351	2.17
Total	\$3,702,081	\$5,965,587	1.61

### Conclusion

Table 7 contains the comparison of public sector costs to private sector costs for each functional area of the Office of Human Resources. These results are as near a true comparison of "apples-to-apples" as can be done, given the reluctance of the private sector to share true costs.

Overall, the South Carolina Budget and Control Board Office of Human Resources' return on investment is 1.61. In other words, one dollar invested in OHR returns \$1.61 in equivalent private sector value.

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## Notes

<sup>1</sup> National Institute of Standards and Technology, *Baldrige Quality Program 2001: Criteria For Performance Excellence*, Washington, DC: Department of Commerce, p. 27 (2001). Note 1 explains that responses might include 'return on investment.'

<sup>2</sup> Mark Graham Brown, *Baldrige Award Winning Quality: How to Interpret the Baldrige Criteria for Performance Excellence*, 11<sup>th</sup> ed., Portland, OR: Productivity, Inc., p. 264 (2001).

<sup>3</sup> Robert S. Kaplan and David P. Norton, *The Balanced Scorecard: Translating Strategy Into Action*, Boston: Harvard Business School Press (1996).

<sup>4</sup> Todd L. Chmielewski and Jack J. Phillips, "Measuring Return-on-Investment in Government: Issues and Procedures," in *Public Personnel Management*, Vol. 31 No. 2, pgs. 225-237 (2002).

<sup>5</sup> D.L. Kirkpatrick, *Evaluating Training Programs: The Four Levels*, Berrett-Koehler Publications: San Francisco, CA (1994) and J.J. Phillips, "The Return-on-Investment Process: Issues and Trends," *Educational Technology* pgs. 7-14 (Vol. 38: July-August, 1998).

<sup>6</sup> Chmielewski and Phillips op. cit. p. 227.

<sup>7</sup> Ibid. p. 233.

<sup>8</sup> Ibid. p. 234.

<sup>9</sup> Ibid. p. 231.

<sup>10</sup> Ibid. p. 235.

<sup>11</sup> Ibid.

<sup>12</sup> Robert B. Denhardt, *Theories of Public Organization*, New York: Harcourt Brace, p. 144 (2000).

<sup>13</sup> Ibid.

<sup>14</sup> William A. Schiemann, "Driving Change Through Surveys: Aligning Employees, Customers and Other Key Stakeholders," in Allen I. Kraut, editor, *Organizational Surveys: Tools for Assessment and Change*, San Francisco: Jossey-Bass, p. 106 (1996).

<sup>15</sup> A database of best practices is maintained by the Research and Information Center of Watson Wyatt Worldwide. Allstate Insurance is identified as the best practice for 50 comparable companies. Its generalist approach to service delivery using HR consultants is the same as that used by the South Carolina Office of Human Resources. Both organizations provide services in the same functional areas as listed in Table 2 of the text.

<sup>16</sup> See [www.pmrbestpractices.com/casestudy.htm](http://www.pmrbestpractices.com/casestudy.htm) for Allstate's customer satisfaction figures and the 2001 Accountability Report of the South Carolina Budget and Control Board for OHR's figures.

<sup>17</sup> Ibid. p. 227.

<sup>18</sup> David Osborne and Peter Plastrik, *The Reinventor's Fieldbook: Tools for Transforming Your Government*, San Francisco: Jossey-Bass, p. 254 (2000).

<sup>19</sup> Brian E. Becker, Mark A. Huselid and Dave Ulrich, *The HR Scorecard: Linking People, Strategy and Performance*, Boston: Harvard Business School Press, p. 83 (2001).

<sup>20</sup> C.H. Fay, P.S. Hempel, S.M. Director and M.A. Huselid, "Costing Human Resource Initiatives," Rutgers University School of Management and Labor Relations, 1997; and C.H. Fay, P.S. Hempel, S.M. Director and M.A. Huselid, "Rutgers Human Resource Costing Model Software (Version 1.3) User's Manual," Rutgers University School of Management and Labor Relations, 1997. Cited in Becker, et al. pgs. 103-105.

<sup>21</sup> Ibid. pgs. 83-34.

<sup>22</sup> Kaplan and Norton, op. cit., p. 57.

<sup>23</sup> Russell M. Linden, *Seamless Government: A Practical Guide to Re-Engineering in the Public Sector*, San Francisco CA: Jossey-Bass, pgs. 267-268 (1994).

<sup>24</sup> Osborne and Plastrik, op. cit., pgs. 186-187.

<sup>25</sup> Management, Organizational and Business Improvement Services (MOBIS) Schedule, Contract Number GS-23F-9763H, Grant Thornton LLP, Vienna, VA (1997 - 2002).